

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-59. (Canceled)

60-65. (Canceled)

66. (New) A hardware upgrade for a set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the hardware upgrade comprising:

an interface coupling to the set top terminal, the interface including an interface signal path for providing communication with a microprocessor of the set top terminal for routing input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

a hardware upgrade microprocessor, coupled to the interface signal path, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into a card receiving slot;

memory, coupled to the hardware upgrade microprocessor, for storing data therein;
and

processing circuitry, coupled to the hardware upgrade microprocessor, the hardware upgrade microprocessor accessing the memory and controlling the processing circuitry to

cause the processing circuitry to provide enhanced functions to the set top terminal via the interface signal path.

67. (New) The hardware upgrade of claim 66, wherein the processing circuitry includes a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends.

68. (New) The hardware upgrade of claim 67, wherein the processing circuitry includes a modulator and demodulator to add a data modulation and demodulation function to the set top terminal such that data may be retrieved by the modem of the hardware upgrade from the one or more headends and stored in the memory of the hardware upgrade.

69. (New) The hardware upgrade of claim 67, wherein the modem of the hardware upgrade retrieves information from an interactive service by accessing an on-line database enabling the set top terminal to engage in transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal.

70. (New) The hardware upgrade of claim 66, wherein the interface is a card insertable interface enabling insertion into a card receiving slot of the set top terminal,

71. (New) The hardware upgrade of claim 66, wherein the modem of the hardware upgrade is capable of communicating with the interactive service outside of the television program delivery system.

72. (New) The hardware upgrade of claim 71, wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

73. (New) A set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

a receiver adapted to receive programs; and

a first hardware upgrade comprising:

an interface coupling to the set top terminal, the interface including an interface signal path for providing communication with a microprocessor of the set top terminal for routing input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

a hardware upgrade microprocessor, coupled to the interface signal path, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into a card receiving slot;

memory, coupled to the hardware upgrade microprocessor, for storing data therein; and

processing circuitry, coupled to the hardware upgrade microprocessor, the hardware upgrade microprocessor accessing the memory and controlling the processing circuitry to cause the processing circuitry to provide enhanced functions to the set top terminal via the interface signal path.

74. (New) The set top terminal of claim 73, wherein the processing circuitry includes a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends.

75. (New) The set top terminal of claim 74, wherein the processing circuitry includes a modulator and demodulator to add a data modulation and demodulation function to the set top terminal such that data may be retrieved by the modem of the hardware upgrade from the one or more headends and stored in the memory of the hardware upgrade.

76. (New) The set top terminal of claim 74, wherein the modem of the hardware upgrade retrieves information from an interactive service by accessing an on-line database enabling the set top terminal to engage in transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal.

77. (New) The set top terminal of claim 73, wherein the interface is a card insertable interface enabling insertion into a card receiving slot of the set top terminal,

78. (New) The set top terminal of claim 73, wherein the modem of the hardware upgrade is capable of communicating with the interactive service outside of the television program delivery system.

79. (New) The set top terminal of claim 78, wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

80. (New) The set top terminal of claim 73, wherein the terminal is an HDN terminal.

81. (New) The set top terminal of claim 73 further comprising:
one or more additional hardware upgrades connected to the terminal.

82. (New) The set top terminal of claim 81, wherein at least one of the one or more additional hardware upgrades is selected from the group consisting of an audio program reception hardware upgrade, an interactive hardware upgrade that receives interactive subscriber input and produces interactive output, and a storage hardware upgrade.

83. (New) A system comprising:

a television program delivery system adapted to deliver television program signals;

and

a set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

a receiver adapted to receive at least some of the television program signals; and

a hardware upgrade comprising:

an interface coupling to the set top terminal, the interface including an interface signal path for providing communication with a microprocessor of the set top terminal for routing input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

a hardware upgrade microprocessor, coupled to the interface signal path, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into a card receiving slot;

memory, coupled to the hardware upgrade microprocessor, for storing data therein; and

processing circuitry, coupled to the hardware upgrade microprocessor, the hardware upgrade microprocessor accessing the memory and controlling the processing circuitry to cause the processing circuitry to provide enhanced functions to the set top terminal via the interface signal path.

84. (New) The system of claim 83, wherein the processing circuitry includes a hardware upgrade modem for providing communication between the hardware upgrade and one or more headends.

85. (New) A method for delivering television programs through a television program delivery system with menu selection of programs, comprising:

receiving subscriber input through a set top terminal interface within a set top terminal, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus;

providing an interface signal path for providing communication with a microprocessor of the set top terminal for routing subscriber input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

receiving, in a card receiving slot of the set top terminal, a hardware upgrade having an interface coupled to the set top terminal, the interface including an interface signal path for providing communication with a microprocessor of the set top terminal for routing input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal, a hardware upgrade microprocessor, coupled to the interface signal path, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into a card receiving slot, memory, coupled to the hardware upgrade microprocessor, for storing data therein and processing circuitry, coupled to the hardware upgrade microprocessor, the hardware upgrade microprocessor accessing the memory and controlling the processing circuitry to cause the processing circuitry to provide enhanced functions to the set top terminal via the interface signal path.

REMARKS

In response to the Notice of Non-Compliance of February 8, 2011, the Notice of Allowance dated December 1, 2010, and in support of the Amendment and Request for Continued Examination filed on February 1, 2011, claims 1-65 have now been canceled and new claims 66-85 have been added. Claims 66-85 are now pending in the application.

Issue of Non-Compliance:

In response to the Notice of Non-Compliance of February 8, 2011 noting that claims 60-65 were previously canceled, Applicant has amended the numbering of the new claims so that the new claims now begin with new claim 66.

In addition, claims 60-65 have been included in the listing of claims with the proper status identifier indicating that claims 61-65 are canceled.

Accordingly, Applicant respectfully submits that the above-identified modifications overcome the issue of non-compliance.

Relationship of New Claims 66-85 To The Previously Cited References:

Previously Banker, Hoarty and Palazzi were cited against the claims.

Applicant respectfully submits that new independent claims 66, 73, 83 and 85 are patentable over the cited references because the cited references, alone or in combination, fail to disclose, teach or suggest a hardware upgrade microprocessor, coupled to a interface signal path and directly connected to the microprocessor of the set top terminal,

and processing circuitry, wherein the hardware upgrade microprocessor accesses a memory and controls the processing circuitry to cause the processing circuitry to provide enhanced functions to the set top terminal via the interface signal path.

The previously cited references merely showed a second microprocessor that executed programs for providing additional functions. The previously cited references failed to suggest processing circuitry controlled by the upgrade processor to provide enhanced functions to the set top terminal.

Dependent claims 67-72, 74-82 and 84 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 66, 73, 83, respectively. Further dependent claims 67-72, 74-82 and 84 recite additional novel elements and limitations. Applicant reserves the right to argue independently the patentability of these additional novel aspects. Therefore, Applicant respectfully submits that dependent claims 67-72, 74-82 and 84 are patentable over the cited references.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 13-2725